

May 16, 2005

Peter Van Alyea
Redwood Oil Company
455 Yolanda Avenue, Suite 200
Santa Rosa, CA 95404

Ground Water Monitoring Report
March 2005
Redwood Oil Service Station
1100 Bennett Valley Road
Santa Rosa, California
ECM Project #98-511-14

Dear Mr. Van Alyea:

This report provides the results of the quarterly ground water monitoring at the Redwood Oil Service Station located at 1100 Bennett Valley Road in Santa Rosa, California (Figure 1, Appendix A). On March 29, 2005, ECM personnel visited the site. Ground water elevations were measured and ground water samples were collected from the eleven monitoring wells (MW-4 through MW-14). The well locations are shown on Figure 2 (Appendix A). A domestic well located at 1020 Bennett Valley Road was also sampled on March 29, 2005.

Ground water levels were measured in all eleven wells. Wells were also checked for the presence of free-phase hydrocarbons. Free-phase hydrocarbons were not observed in any of the wells. Wellheads and well vaults were observed to be in good condition. Water level data is shown in Table 1 (Appendix B) and a ground water elevation contour map is included as Figure 2 (Appendix A).

The samples were forwarded under chain of custody record to Friedman and Bruya Inc. of Seattle, Washington for analysis. Analytical results for ground water are included in Table 2 (Appendix B). Ground water samples were collected in accordance with ECM Standard Operating Procedure - Ground Water Sampling (Appendix E). The chain of custody document and laboratory analytical report are included as Appendix C. Water sampling data sheets are included in Appendix D. Purge water and decon rinseate were transferred to an ROC holding tank for proper disposal.

Monitoring wells at the site have consistently been impacted by gasoline, diesel, BTEX constituents, and MTBE. Analytical results for this sampling event were typical of results for previous sampling events.

Wells MW-4 through MW-7 represent the most impacted area of the site due to their proximity to the former USTs. Contaminant concentrations were relatively high in the samples from wells MW-4, MW-6 and MW-7, and were typical of previous sampling events. The sample from well MW-5 was heavily impacted with gasoline, diesel, BTEX compounds and MTBE. Results showed a slight increase in contaminant concentrations in MW-5 from the last sampling event.

Wells MW-8 and MW-9 are located south of the site. Contaminant concentrations for samples from MW-8 and MW-9 have typically been low or below detection limits. Results for this sampling event were consistent with historical results.

Wells MW-10, MW-11, and MW-12 are located to the west of the site. Analytical results for samples from MW-10 and MW-11 have consistently been low or below detection limits for all contaminants of concern. Contaminant concentrations in the sample from MW-10 were consistent with previous results.

Results from this sampling event continued to support a long term reduction trend for contamination in MW-11. Trace levels of BTEX constituents were detected in the sample for this event. No gasoline, diesel, or MTBE was detected in MW-11.

Samples from MW-12 have fluctuated from high concentrations to concentrations below detection limits. Samples collected during this event contained moderate concentrations of gasoline and BTEX compounds. High contaminant concentrations appear to correlate to periods of elevated ground water. Future monitoring events may help to confirm this trend.

Well MW-13 is located north of the site. Results for this quarter were low to moderate for gasoline and BTEX compounds in the sample from MW-13. No diesel or MTBE was detected in the sample from MW-13. Historical analytical results show a long-term reduction from previously high levels of gasoline and BTEX constituents. Results for this sampling event were consistent with this reduction trend.

Well MW-14 is located to the west of the site. Analytical results for samples from MW-14 have typically been moderate to high for gasoline, diesel, and BTEX constituents. Results for this sampling event were consistent with historical results.

This site has a ground water extraction and treatment system for remediation of impacted ground water. The system extracts ground water through three extraction wells, labeled EX-1, EX-2, and EX-3 on Figure 2, Appendix A. The system was off during the first quarter of 2005 for final modifications and permit approval. The system has been reconfigured to handle free-phase product captured by the extraction system. Free-phase product was observed in the system transfer tank during the summer of 2004.

Peter Van Alyea
ECM Project #98-511-14

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Thank you for the opportunity to provide services to Redwood Oil Company. Please call if you have any questions.

Sincerely,
ECM Group



David Hazard
Environmental Scientist



Chris Bramer
Professional Engineer #C048846

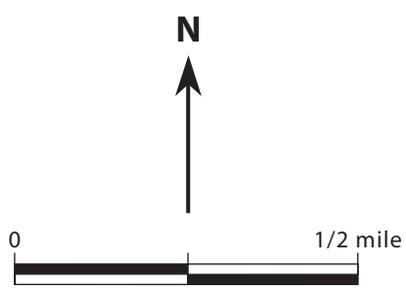
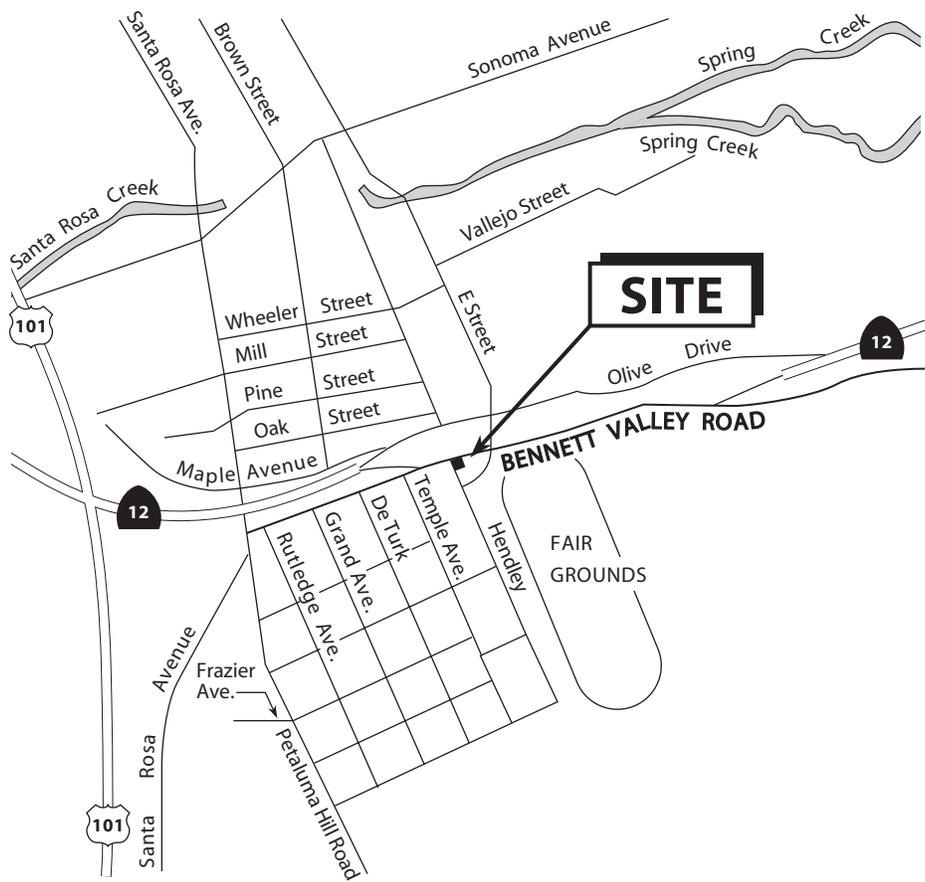


Attachments: A - Figures
 B - Tables
 C - Chain of Custody Document and Lab Analytical Reports
 D - Water Sampling Data Sheets
 E - Standard Operating Procedure

cc: Joan Fleck, North Coast Regional Water Quality Control Board

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APPENDIX A
FIGURES



Base map ref: Thomas Bros.

Figure 1. Site Location Map – Redwood Oil Service Station, 1100 Bennett Valley Road, Santa Rosa, California

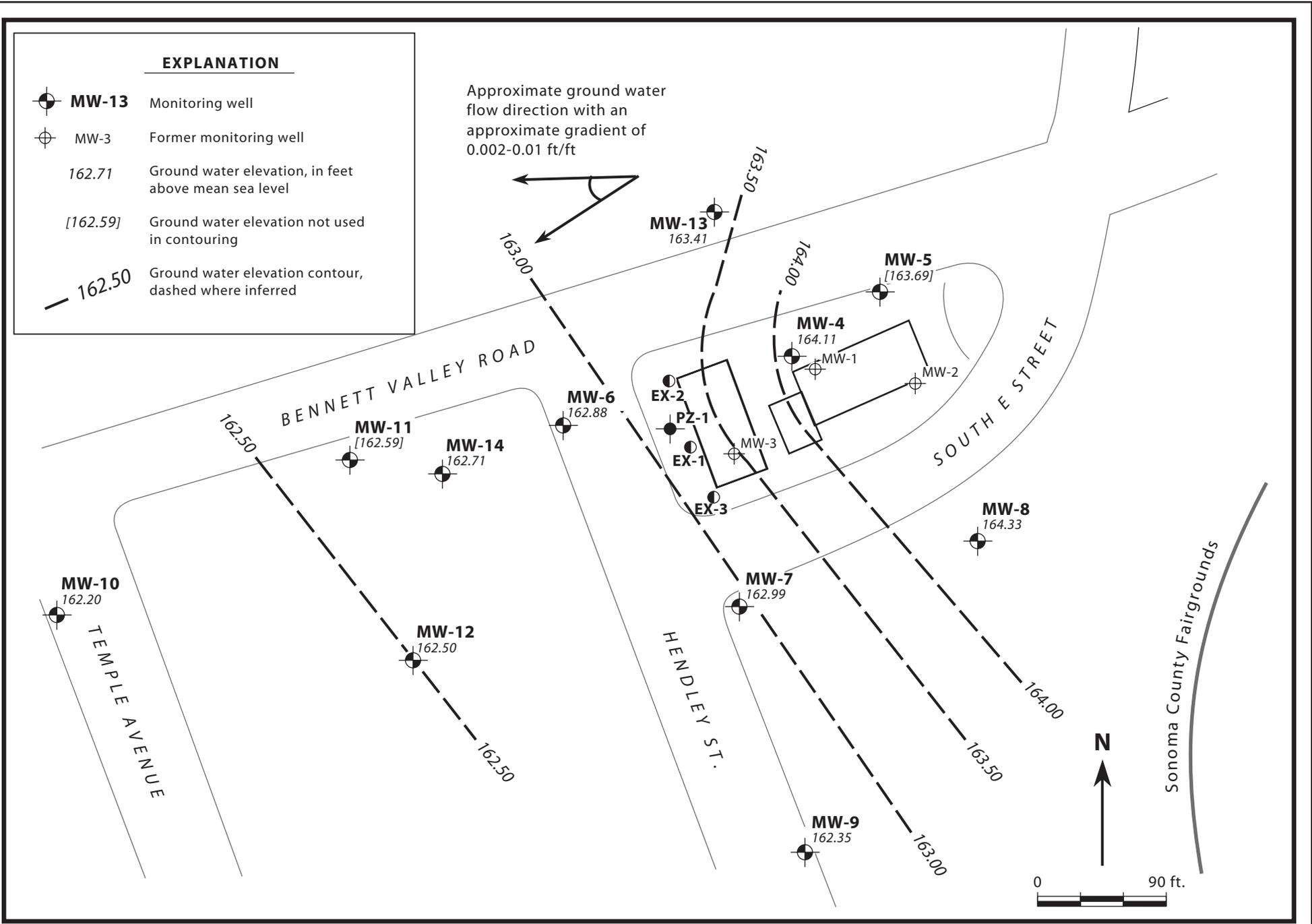


Figure 2. Monitoring Well Locations and Ground Water Elevation Contour Map - March 29, 2005 - Redwood Oil Service Station #106, 1100 Bennett Valley Road, Santa Rosa, California

APPENDIX B
TABLES

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Date	TOC (Ft,msl)	DTW (Ft)	GWE (Ft,msl)	Screen Interval	Sand Pack Interval	Bentonite Interval	Notes
MW-4	9/18/1998	165.15	5.95	159.20	5-20	4-20	0-4	
	1/4/1999		7.12	158.03				
	3/10/1999		4.37	160.78				
	10/1/1999		7.73	157.42				
	1/5/2000		8.70	156.45				
	3/29/2000		4.88	160.27				
	7/11/2000		7.60	157.55				
	9/29/2000		8.11	157.04				
	12/7/2000		8.52	156.63				
	3/6/2001		6.60	158.55				
	6/21/2001		7.05	158.10				
	9/18/2001		8.47	156.68				
	12/19/2001		7.05	158.10				
	3/20/2002		4.50	163.21				
	6/20/2002	167.71	6.18	161.53				
	9/20/2002		7.68	160.03				Monitoring well was surveyed for EDF compliance.
	12/31/2002		3.42	164.29				
	3/25/2003		4.80	162.91				
	7/1/2003		5.76	161.95				
	10/2/2003		7.61	160.10				
	12/9/2003		7.80	159.91				
	3/2/2004		4.12	163.59				
	6/8/2004		7.00	160.71				
	6/28/2004		7.37	160.34				
	9/9/2004		8.71	159.00				
	12/28/2004		7.84	159.87				
	3/29/2005		3.60	164.11				

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Date	TOC (Ft,msl)	DTW (Ft)	GWE (Ft,msl)	Screen Interval	Sand Pack Interval	Bentonite Interval	Notes
MW-6	9/18/1998	163.49	8.50	154.99	5-20	4-20	0-4	
	1/4/1999		7.88	155.61				
	3/10/1999		3.97	159.52				
	10/1/1999		9.65	153.84				
	1/5/2000		9.70	153.79				
	3/29/2000		5.91	157.58				
	7/13/001		---	---				Monitoring well was inaccessible
	9/29/2000		9.73	153.76				
	12/7/001		---	---				Monitoring well was inaccessible
	3/6/2001		4.37	159.12				
	6/21/2001		8.52	154.97				
	9/18/2001		10.12	153.37				
	12/19/2001		9.93	153.56				
	3/20/2002		166.52	5.29				161.23
	6/20/2002	7.95		158.57				
	9/20/2002	9.91		156.61				
	12/31/2002	3.89		162.63				
	3/25/2003	5.59		160.93				
	7/1/2003	7.58		158.94				
	10/2/2003	9.70		156.82				
	12/9/2003	8.70		157.82				
	3/2/2004	5.21		161.31				
	6/8/2004	8.51		158.01				
	6/28/2004	9.93		156.59				
	9/9/2004	11.04		155.48				
	12/28/2004	--	--	Monitoring well was inaccessible				
3/29/2005		3.64	162.88					

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Date	TOC (Ft,msl)	DTW (Ft)	GWE (Ft,msl)	Screen Interval	Sand Pack Interval	Bentonite Interval	Notes
MW-7	9/18/1998	163.33	8.81	154.52	5-20	4-20	0-4	
	1/4/1999		7.18	156.15				
	3/10/1999		4.40	158.93				
	10/1/1999		8.31	155.02				
	1/5/2000		8.79	154.54				
	3/29/2000		4.96	158.37				
	7/11/2000		7.11	156.22				
	9/29/2000		8.68	154.65				
	12/7/2000		8.31	155.02				
	3/6/2001		4.62	158.71				
	6/21/2001		7.70	155.63				
	9/18/2001		9.17	154.16				
	12/19/2001		4.96	158.37				
	3/20/2002		167.01	---				---
	6/20/2002	7.00		160.01				
	9/20/2002	8.81		158.20				
	12/31/2002	4.17		162.84				
	3/25/2003	5.00		162.01				
	7/1/2003	6.92		160.09				
	10/2/2003	8.70		158.31				
	12/9/2003	8.24		158.77				
	3/2/2004	5.61		161.40				
	6/8/2004	8.12		158.89				
	6/28/2004	9.29		157.72				
	9/9/2004	10.34		156.67				
	12/28/2004	6.02		160.99				
	3/29/2005	4.02	162.99					

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Date	TOC (Ft,msl)	DTW (Ft)	GWE (Ft,msl)	Screen Interval	Sand Pack Interval	Bentonite Interval	Notes
MW-8	9/18/1998	164.37	6.00	158.37	5-20	4-20	0-4	
	1/4/1999		7.84	156.53				
	3/10/1999		2.41	161.96				
	10/1/1999		7.29	157.08				
	1/5/2000		7.57	156.80				
	3/29/2000		3.52	160.85				
	7/11/2000		5.71	158.66				
	9/29/2000		7.42	156.95				
	12/7/2000		7.00	157.37				
	3/6/2001		3.08	161.29				
	6/21/2001		6.22	158.15				
	9/18/2001		7.87	156.50				
	12/19/2001		3.45	160.92				
	3/20/2002		166.93	3.10				163.83
	6/20/2002	5.48		161.45				
	9/20/2002	7.30		159.63				
	12/31/2002	2.99		163.94				
	3/25/2003	3.29		163.64				
	7/1/2003	5.20		161.73				
	10/2/2003	7.21		159.72				
	12/9/2003	6.67		160.26				
	3/2/2004	2.38		164.55				
	6/8/2004	6.27		160.66				
	6/28/2004	6.91		160.02				
	9/9/2004	8.15		158.78				
	12/28/2004	5.28		161.65				
	3/29/2005	2.60		164.33				

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Date	TOC (Ft,msl)	DTW (Ft)	GWE (Ft,msl)	Screen Interval	Sand Pack Interval	Bentonite Interval	Notes
MW-9	7/11/2000	162.72	6.28	156.44	5-20	4-20	2-4	
	9/29/2000		7.75	154.97				
	12/7/2000		7.30	155.42				
	3/6/2001		4.34	158.38				
	6/21/2001		6.95	155.77				
	9/18/2001		8.25	154.47				
	12/19/2001		4.66	158.06				
	3/20/2002	166.40	4.70	161.70				
	6/20/2002		6.41	159.99				Monitoring well was surveyed for EDF compliance.
	9/20/2002		7.92	158.48				
	12/31/2002		3.75	162.65				
	3/25/2003		5.71	160.69				
	7/1/2003		6.20	160.20				
	10/2/2003		7.30	159.10				
	12/9/2003		6.78	159.62				
	3/2/2004		4.39	162.01				
	6/8/2004		7.10	159.30				
	6/28/2004		7.66	158.74				
	9/9/2004		8.77	157.63				
	12/28/2004		4.66	161.74				
3/29/2005	4.05	162.35						

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Date	TOC (Ft,msl)	DTW (Ft)	GWE (Ft,msl)	Screen Interval	Sand Pack Interval	Bentonite Interval	Notes
MW-10	7/11/2000	162.23	8.50	153.73	5-20	4-20	2-4	
	9/29/2000		10.07	152.16				
	12/7/2000		9.47	152.76				
	3/6/2001		4.61	157.62				
	6/21/2001		9.00	153.23				
	9/18/2001		10.50	151.73				
	12/19/2001		5.10	157.13				
	3/20/2002	165.91	5.75	160.16				
	6/20/2002		8.45	157.46				Monitoring well was surveyed for EDF compliance.
	9/20/2002		10.28	155.63				
	12/31/2002		3.53	162.38				
	3/25/2003		6.10	159.81				
	7/1/2003		8.12	157.79				
	10/2/2003		10.10	155.81				
	12/9/2003		8.70	157.21				
	3/2/2004		4.55	161.36				
	6/8/2004		8.73	157.18				
	6/28/2004		9.34	156.57				
	9/9/2004		10.41	155.50				
	12/28/2004		4.74	161.17				
3/29/2005	3.71	162.20						

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Date	TOC (Ft,msl)	DTW (Ft)	GWE (Ft,msl)	Screen Interval	Sand Pack Interval	Bentonite Interval	Notes
MW-11	7/11/2000	162.86	8.36	154.50	5-20	4-20	2-4	
	9/29/2000		9.96	152.90				
	12/7/2000		9.37	153.49				
	3/6/2001		4.65	158.21				
	6/21/2001		8.78	154.08				
	9/18/2001		10.31	152.55				
	12/19/2001		5.20	157.66				
	3/20/2002	166.54	5.65	160.89				
	6/20/2002		8.27	158.27				Monitoring well was surveyed for EDF compliance.
	9/20/2002		10.21	156.33				
	12/31/2002		4.11	162.43				
	3/25/2003		5.98	160.56				
	7/1/2003		7.94	158.60				
	10/2/2003		10.00	156.54				
	12/9/2003		8.86	157.68				
	3/2/2004		5.14	161.40				
	6/8/2004		8.75	157.79				
	6/28/2004		9.88	156.66				
	9/9/2004		10.98	155.56				
	12/28/2004		6.28	160.26				
3/29/2005	3.95	162.59						

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Date	TOC (Ft,msl)	DTW (Ft)	GWE (Ft,msl)	Screen Interval	Sand Pack Interval	Bentonite Interval	Notes
MW-12	7/11/2000	162.86	8.49	154.37	5-20	4-20	2-4	
	9/29/2000		10.04	152.82				
	12/7/2000		---	---				Monitoring well was inaccessible
	3/6/2001		---	---				Monitoring well was inaccessible
	6/21/2001		9.04	153.82				
	9/18/2001		10.46	152.40				
	12/19/2001	162.86	7.30	155.56				
	3/20/2002	166.56	5.81	160.75				Monitoring well was surveyed for EDF compliance.
	6/20/2002		8.48	158.08				
	9/20/2002		10.35	156.21				
	12/31/2002		---	---				Monitoring well was inaccessible
	3/25/2003		6.06	160.50				
	7/1/2003		8.12	158.44				
	10/2/2003		10.18	156.38				
	12/9/2003		9.03	157.53				
	3/2/2004		5.09	161.47				
	6/8/2004		8.96	157.60				
	6/28/2004	9.91	156.65					
	9/9/2004	11.06	155.50					
	12/28/2004	6.34	160.22					
3/29/2005	4.06	162.50						

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Date	TOC (Ft,msl)	DTW (Ft)	GWE (Ft,msl)	Screen Interval	Sand Pack Interval	Bentonite Interval	Notes
MW-13	7/11/2000	164.14	9.63	154.51	5-20	4-20	2-4	
	9/29/2000		10.61	153.53				
	12/7/2000		10.07	154.07				
	3/6/2001		5.22	158.92				
	6/21/2001		9.37	154.77				
	9/18/2001		11.00	153.14				
	12/19/2001		5.72	158.42				
	3/20/2002	167.82	5.97	161.85				
	6/20/2002		8.67	159.15				Monitoring well was surveyed for EDF compliance.
	9/20/2002		10.67	157.15				
	12/31/2002		4.80	163.02				
	3/25/2003		6.22	161.60				
	7/1/2003		8.21	159.61				
	10/2/2003		10.44	157.38				
	12/9/2003		9.50	158.32				
	3/2/2004		6.19	161.63				
	6/8/2004		9.32	158.50				
	6/28/2004		10.98	156.84				
	9/9/2004		12.11	155.71				
	12/28/2004		7.46	160.36				
	3/29/2005		4.41	163.41				

Table 1. Monitoring Well Survey Data, Well Construction Details, and Depth to Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Date	TOC (Ft,msl)	DTW (Ft)	GWE (Ft,msl)	Screen Interval	Sand Pack Interval	Bentonite Interval	Notes
MW-14	3/20/2002	166.97	5.90	161.07	5-20	4-20	0-4	Monitoring well was surveyed for EDF compliance.
	6/20/2002		8.58	158.39				
	9/20/2002		10.51	156.46				
	12/31/2002		4.53	162.44				
	3/25/2003		6.23	160.74				
	7/1/2003		8.17	158.80				
	10/2/2003		10.29	156.68				
	12/9/2003		9.19	157.78				
	3/2/2004		5.62	161.35				
	6/8/2004		9.08	157.89				
	6/28/2004		10.34	156.63				
	9/9/2004		11.47	155.50				
	12/28/2004		6.74	160.23				
	3/29/2005		4.26	162.71				
PZ-1	3/2/2004	168.23	11.56	156.67	5-20	4-20	0-4	Monitoring well was surveyed for EDF compliance.
	6/8/2004		10.42	157.81				
	6/28/2004		15.27	152.96				
	9/9/2004		16.38	151.85				

ft = feet
 msl = Mean Sea Level
 DTW = Depth to Water
 GWE = Ground Water Elevation

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
		----- ppb ----->							
MW-4	9/18/1998	87,000	16,000	8,500	8,200	1,900	7,700	5,900	Note 1: Sample analyzed for fuel oxygenates. See analytical report for details.
	1/4/1999	79,000	<1,000	13,000	7,500	1,800	8,800	7,800	
	3/10/1999	44,000	<50	7,700	4,400	970	4,100	3,600	
	6/30/1999	17,000	270	2,200	300	490	800	3,000	Sample was flagged. See analytical report for details
	10/1/1999	---	---	---	--	--	--	---	Monitoring well now on semi annual sampling
	1/5/2000	32,000	<50	8,600	770	1,100	2,500	6,000	
	3/29/2000	64,000	3,200	9,500	7,400	1,700	6,100	9,000	Sample was flagged. See analytical report for details
	7/11/2000	14,000	790	4,300	130	680	420	5,100	Sample was flagged. See analytical report for details
	9/29/2000	19,000	<50	3,100	210	570	470	3,900	
	12/7/2000	41,000	<50	3,600	1,700	260	1,400	1,300	
	3/6/2001	25,000	<50	4,300	4,100	420	2,100	860	See Note 1
	6/21/2001	720	160	140	18	28	12	340	
	9/18/2001	3,900	710	1,100	190	120	340	730	
	12/19/2001	21,000	1,200	5,000	3,200	710	1,800	1,500	
	3/20/2002	<50	<250	<1	<1	<1	<1	200	See Note 1
	6/20/2002	150	<50	21	5	4	7	87	
	9/20/2002	720	120	34	3.8	3.5	7.1	720	See Note 1
	12/31/2002	1,300	<50	200	95	22	82	77	See Note 1
	3/25/2003	380	<125	120	30	7	27	3	
	7/1/2003	450	<50	160	62	14	54	10	
10/2/2003	400	50	140	37	9	31	2		
12/9/2003	1,000	64	290	100	26	113	47	See Note 1	
3/2/2004	650	<50	190	84	21	82	49		
6/8/2004	<25	260	<0.5	<0.5	<0.5	<1	<1		
9/14/2004	950	55	120	46	16	67	37		
12/28/2004	4,400	310	2,200	39	49	73	1,300		
3/29/2005	3,800	200	350	150	65	320	180		

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
		----- ppb ----->							
MW-5	9/18/1998	160,000	39,000	33,000	20,000	4,000	20,000	15,000	See Note 1
	1/4/1999	160,000	<50	31,000	22,000	3,100	16,000	8,400	
	3/10/1999	190,000	230	34,000	13,000	3,500	15,000	6,800	Sample was flagged. See analytical report for details
	6/30/1999	130,000	1,700	22,000	15,000	2,500	12,000	4,900	Sample was flagged. See analytical report for details
	10/1/1999	---	---	---	---	--	---	---	Monitoring well now on semi annual sampling
	1/5/2000	170,000	<50	38,000	23,000	3,000	16,000	8,000	
	3/29/2000	130,000	5,000	17,000	9,300	3,500	12,000	6,500	Sample was flagged. See analytical report for details
	7/11/2000	190,000	29,000	33,000	21,000	2,800	13,000	6,500	Sample was flagged. See analytical report for details
	9/29/2000	260,000	<50	28,000	25,000	3,700	18,000	7,700	
	12/7/2000	250,000	<50	21,000	13,000	2,200	12,000	6,500	
	3/6/2001	96,000	<50	54,000	12,000	2,100	9,500	2,300	See Note 1
	6/21/2001	90,000	6,500	23,000	12,000	2,400	11,000	6,200	
	9/18/2001	88,000	3,100	23,000	12,000	3,000	14,000	3,600	
	12/19/2001	84,000	5,100	25,000	9,600	2,800	12,000	330,013	See Note 1
	3/20/2002	43,000	6,200	19,000	7,300	1,900	9,800	2,200	
	6/20/2002	94,000	7,800	28,000	11,000	2,200	8,600	3,200	
	9/20/2002	120,000	3,700	30,000	14,000	3,300	15,000	3,000	See Note 1
	12/31/2002	110,000	10,000	23,000	9,500	3,000	11,000	2,400	See Note 1
	3/25/2003	83,000	7,800	26,000	8,000	2,800	11,200	1,600	See Note 1
	7/1/2003	62,000	5,300	33,000	11,000	3,300	13,000	2,200 19	See Note 1
10/2/2003	90,000	8,000	31,000	10,000	3,300	13,100	2,500	See Note 1	
12/9/2003	110,000	6,700	29,000	8,800	3,100	13,000	1,600	See Note 1	
3/2/2004	120,000	8,600	38,000	11,000	4,000	13,700	1,000		
6/8/2004	81,000	5,500	31,000	8,100	2,900	10,000	1,300		
9/14/2004	97,000	8,700	27,000	7,100	3,100	11,600	1,100		
12/28/2004	68,000	12,000	17,000	2,400	2,800	12,000	660		
3/29/2005	120,000	5,000	28,000	6,200	3,200	11,200	720		

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
		----- ppb ----->							
MW-6	9/18/1998	49,000	8,000	10,000	3,200	1,600	5,200	10	Sample was flagged. See analytical report for details
	1/4/1999	11,000	<50	5,900	360	730	800	180	
	3/10/1999	18,000	190	2,800	330	77	930	91	
	6/30/1999	23,000	150	7,000	400	480	770	120	Sample was flagged. See analytical report for details
	10/1/1999	18,000	640	6,300	78	370	190	<250	Sample was flagged. See analytical report for details
	1/5/2000	22,000	<50	8,500	110	350	330	260	
	3/29/2000	15,000	1,200	4,200	380	290	460	<50	Sample was flagged. See analytical report for details
	7/13/2000	15,000	2,300	3,100	180	400	1,300	<13	Sample was flagged. See analytical report for details
	9/29/2000	33,000	<50	9,800	120	530	760	610	
	12/7/008	---	---	---	---	---	---	---	Monitoring Well was inaccessible
	3/6/2001	43,000	<50	30,000	1,300	760	1,300	120	See Note 1
	6/21/2001	44,000	1,700	18,000	810	1,500	1,800	<1,250	
	9/18/2001	25,000	960	11,000	240	810	780	<1,000	
	12/19/2001	27,000	750	12,000	360	510	480	790	See Note 1
	3/20/2002	20,000	1,400	16,000	1,300	980	1,310	810	
	6/20/2002	23,000	750	11,000	350	540	330	960	
	9/20/2002	<50,000	570	12,000	<500	510	<1,000	1,500	See Note 1
	12/31/2002	21,000	440	8,200	270	340	340	2,300	See Note 1
	3/25/2003	32,000	1,900	14,000	1,100	900	1,170	1,000	See Note 1
	7/1/2003	19,000	960	14,000	440	550	414	1,400	See Note 1
10/2/2003	21,000	1,200	12,000	130	450	163	1,900	See Note 1	
12/9/2003	3,300	190	1,500	18	44	24	280	See Note 1	
3/2/2004	840	<50	500	38	40	42	47		
6/8/2004	1,000	110	500	<5	55	11	<10		
9/14/2004	<50	<50	<0.5	<0.5	<0.5	<1.5	1		
12/28/2004	---	---	---	---	---	---	---	Well was inaccessible.	
	3/29/2005	6,300	700	1200	160	180	379	29	

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
		----- ppb ----->							
MW-7	9/18/1998	<50	3,000	<0.5	<0.5	<0.5	<1.0	<1	Sample was flagged. See analytical report for details
	1/4/1999	4,200	<50	1,900	81	160	280	35	
	3/10/1999	9,800	<50	<0.50	70	150	390	18	
	6/30/1999	13,000	78	3,000	320	320	670	<125	
	10/1/1999	7,800	2,600	2,700	140	220	420	<100	Sample was flagged. See analytical report for details
	1/5/2000	14,000	<50	4,500	120	300	650	<50	
	3/29/2000	14,000	360	4,100	94	360	220	<50	Sample was flagged. See analytical report for details
	7/11/2000	8,500	560	3,000	53	270	220	12	Sample was flagged. See analytical report for details
	9/29/2000	15,000	<50	3,700	41	290	360	<25	
	12/7/2000	7,000	<50	1,300	83	160	280	<25	
	3/6/2001	13,000	1,200	4,600	110	510	850	<2.0	Sample analyzed for fuel oxygenates. See analytical report for details.
	6/21/2001	12,000	660	2,800	95	350	590	<500	
	9/18/2001	2,600	140	1,000	36	85	110	<50	
	12/19/2001	9,300	600	3,800	76	450	370	<50	See Note 1
	3/20/2002	---	---	---	---	---	---	---	Well was inaccessible.
	6/20/2002	6,800	730	2,600	34	270	112	<20	
	9/20/2002	14,000	330	4,800	<125	500	540	7.7	See Note 1
	12/31/2002	9,300	770	2,600	70	240	300	5	See Note 1
	3/25/2003	3,600	470	1,600	10	120	28	41	
	7/1/2003	600	52	200	18	22	34	49	
10/2/2003	3,200	480	1,600	23	130	176	31		
12/9/2003	16,000	170	390	17	24	45	24	See Note 1	
3/2/2004	4,100	330	1,300	9	47	29	17		
6/8/2004	2,000	110	860	16	47	46	<10		
9/14/2004	5,000	110	980	23	84	58.8	6		
12/28/2004	6,000	920	1,800	27	68	61.1	3.7		
3/29/2005	1,600	100	350	5	22	8	2		

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
		----- ppb ----->							
MW-8	9/18/1998	<50	<50	3	1	<0.5	<1.0	<1	
	1/4/1999	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	3/10/1999	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	6/30/1999	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	10/1/1999	<50	<50	<0.5	<0.5	<0.5	1.2	<5.0	
	1/5/2000	220	<50	7.1	0.7	0.5	1.7	<2.0	
	3/29/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
	7/11/2000	76	<50	4.6	<0.5	<0.5	0.5	<0.5	
	9/29/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
	12/7/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
	3/6/2001	<50	<50	2.8	<0.5	<0.5	<0.5	<2.0	See Note 1
	6/21/2001	<50	52	6	2.3	1.1	2.6	<5.0	
	9/18/2001	<50	<50	<0.5	0.62	<0.5	<0.5	<5.0	
	12/19/2001	51	84	6	0.8	0.9	2.6	<5	See Note 1
	3/20/2002	<50	<50	<1	<1	<1	<1	<1	
	6/20/2002	78	<50	18	5	4	7	4	
	9/20/2002	<50	<50	<0.5	<0.5	<0.5	<1	<5	
	12/31/2002	61	200	13	2.2	2.1	4.6	<1	
	3/25/2003	55	<50	16	3	1	5	<1	
	7/1/2003	<50	<50	11	2	2	4	<1	
10/2/2003	<50	<50	<1	<1	<1	<1	<1		
12/9/2003	71	<50	10	5	2	8	<1		
3/2/2004	69	<50	5	13	2	13	1		
6/8/2004	<25	<50	<0.5	0.6	<0.5	<1	<1		
9/14/2004	<50	<50	3.3	1.4	0.7	3	<0.5		
12/28/2004	<50	<50	<0.5	<0.5	<0.5	<1.5	<0.5		
3/29/2005	<100	<50	3.1	<0.5	0.5	<1.5	1.9		

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
----- ppb ----->									
MW-9	7/11/2000	92	<50	6.4	<0.5	1.2	1	<0.5	
	9/29/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
	12/7/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
	3/6/2001	<50	<50	1.1	<0.5	<0.5	<0.5	<2.0	See Note 1
	6/21/2001	67	<50	0.61	0.53	<0.5	<0.5	<5.0	
	9/18/2001	<50	<50	1.4	0.63	<0.5	<0.5	<5.0	
	12/19/2001	<50	<50	4.7	0.74	0.66	1.9	<5	
	3/20/2002	110	<50	35	8	4	7	<1	
	6/20/2002	99	<50	25	5	5	8	5	
	9/20/2002	<50	<50	18	0.8	1.5	<1	<5	
	12/31/2002	54	220	11	3.4	1.9	5.1	<1	
	3/25/2003	57	<50	15	4	2	6	<1	
	7/1/2003	63	<50	24	4	3	7	<1	
	10/2/2003	<50	<50	12	<1	<1	<1	<1	
	12/9/2003	53	<50	6	6	2	9	<1	
	3/2/2004	83	<50	6	15	2	15	1	
	6/8/2004	<25	<50	<0.5	0.6	<0.5	<1	<1	
	9/14/2004	<50	<50	2	3	1.2	5.9	<0.5	
12/28/2004	<50	<50	<0.5	<5	<0.5	<1.0	<0.5		
3/29/2005	<100	<50	0.9	<0.5	<0.5	<1.5	<0.5		

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
MW-10	7/11/2000	<50	<50	1.5	<0.5	<0.5	<0.5	8.1	
	9/29/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	12	
	12/7/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	13	
	3/6/2001	110	<50	20	1.2	0.82	0.75	12	See Note 1
	6/21/2001	57	<50	6.3	1.5	0.78	1.2	34	
	9/18/2001	59	<50	7	1.1	0.6	1.2	39	
	12/19/2001	60	80	7.5	0.68	0.56	1	47	See Note 1
	3/20/2002	82	<250	23	7	3	7	26	
	6/20/2002	150	<50	47	7	6	8	60	
	9/20/2002	380	<50	160	2.7	12	11	66	
	12/31/2002	140	<50	37	3.9	2.5	5.6	64	See Note 1
	3/25/2003	110	<50	38	6	3	8	63	
	7/1/2003	77	<50	29	4	3	7	71	
	10/2/2003	58	<50	29	<1	<1	<1	110	
	12/9/2003	67	<50	8	8	2	10	96	
	3/2/2004	82	<50	6	13	2	14	83	
	6/8/2004	35	<50	<0.5	0.5	<0.5	<1	54	
	9/14/2004	<50	<50	<0.5	<0.5	<0.5	<1.5	35	
12/28/2004	<50	<50	44	<0.5	<0.5	0.89	<0.5		
3/29/2005	<100	<50	3.1	1.0	1.1	1.7	29		

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
MW-11	7/11/2000	3,000	770	260	48	8.3	550	12	Sample was flagged. See analytical report for details
	9/29/2000	8,500	<50	1,400	9.6	280	760	33	
	12/7/2000	3,300	<50	340	6.9	70	240	<2.5	
	3/6/2001	540	<50	220	2.5	2.7	7.8	<2.0	See Note 1
	6/21/2001	930	170	250	9.1	41	44	<25	
	9/18/2001	1,200	160	290	12	83	120	<25	
	12/19/2001	140	140	34	1.5	2.4	3.6	<5	
	3/20/2002	<50	<50	<1	<1	<1	<1	<1	
	6/20/2002	140	<50	37	5	5	7	6	
	9/20/2002	64	<50	32	1.2	1.9	1.3	<5	
	12/31/2002	53	<50	17	2.9	1.9	4.4	<1	
	3/25/2003	97	<125	29	5	2	8	<1	
	7/1/2003	51	<50	16	3	2	7	<1	
	10/2/2003	<50	<50	15	<1	<1	<1	<1	
	12/9/2003	69	<50	8	8	2	10	<1	
	3/2/2004	92	<50	8	15	3	15	1	
	6/8/2004	<25	<50	1.1	<0.5	<0.5	<1	<1	
9/14/2004	<50	<50	<0.5	<0.5	<0.5	<1.5	<0.5		
12/28/2004	<50	<50	3	<5.0	0.69	1	<0.5		
3/29/2005	<100	<50	2.3	0.6	0.7	1.1	<0.5		

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
----- ppb ----->									
MW-12	7/11/2000	3,400	340	710	46	78	70	3.3	Sample was flagged. See analytical report for details
	9/29/2000	3,500	<50	1,100	8.8	100	4.2	4.7	
	12/7/2000	---	---	---	---	---	---	---	Well was inaccessible.
	3/6/2001	---	---	---	---	---	---	---	Well was inaccessible.
	6/21/2001	620	84	210	4	8	<2.5	<25	
	9/18/2001	76	<50	17	1.6	0.99	2.1	11	
	12/19/2001	88	97	23	1.7	1.3	2.6	22	See Note 1
	3/20/2002	540	<50	170	12	8	12	8	
	6/20/2002	320	62	92	8	7	8	14	
	9/20/2002	<250	---	76	<2.5	3.4	<5	36	
	12/31/2002	---	---	---	---	---	---	---	Well was inaccessible.
	3/25/2003	1,600	100	540	15	50	15	8	
	7/1/2003	2,100	120	680	21	110	24	6	
	10/2/2003	150	<50	57	<1	1	<1	27	
	12/9/2003	340	<50	87	10	3	12	14	
	3/2/2004	1,100	69	270	20	6	21	7	
	6/8/2004	47	<50	<0.5	<0.5	<0.5	<1	1.5	
9/14/2004	<50	<50	<0.5	<0.5	<0.5	<1.5	2		
12/28/2004	<50	80	<0.5	<0.5	<0.5	<1.5	<0.5		
3/29/2005		580	<50	90	3.1	13	7.7	0.6	

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
		----- ppb ----->							
MW-13	8/8/2000	53,000	<50	3,700	5,600	1,400	7,200	ND	See Note 1
	9/29/2000	11,000	<50	890	350	900	800	<5.0	
	12/7/2000	1,200	<50	170	7.5	7.7	26	<2.5	
	3/6/2001	1,000	<50	480	30	19	110	<2.0	See Note 1
	6/21/2001	750	110	260	10	20	14	<25	
	9/18/2001	1,700	160	520	110	65	110	<50	
	12/19/2001	6,500	98	570	380	130	720	<5	See Note 1
	3/20/2002	210	<250	34	2	<1	6	<1	
	6/20/2002	420	<250	130	63	15	46	10	
	9/20/2002	100	<50	36	1.5	4	2.2	<5	
	12/31/2002	2,600	320	410	170	84	240	<1	See Note 1
	3/25/2003	270	<125	160	32	18	42	<1	
	7/1/2003	220	<50	58	15	8	23	<1	
	10/2/2003	410	<50	120	23	22	49	<1	
	12/9/2003	490	<50	100	12	15	47	<1	
	3/2/2004	530	<50	140	40	12	49	2	
	6/8/2004	47	<50	9.8	<0.5	0.7	<1	<1	
	9/14/2004	540	<50	99	15	13	28.9	<0.5	
12/28/2004	110	<50	45	<0.5	<0.5	0.92	<0.5		
3/29/2005	110	<50	22	1.3	2.2	2.8	<0.5		

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
		----- ppb ----->							
MW-14	3/20/2002	8,100	2,300	200	20	2	1,700	6	
	6/20/2002	530	<50	100	19	15	27	52	
	9/20/2002	720	98	180	29	19	34	75	See Note 1
	12/31/2002	900	96	130	58	22	55	140	See Note 1
	3/25/2003	590	<125	160	50	21	35	63	
	7/1/2003	220	<50	68	11	7	15	52	
	10/2/2003	460	740	1,500	190	250	370	25	
	12/9/2003	220	<50	53	8	8	13	22	See Note 1
	3/2/2004	2,700	200	1,300	8	180	19	7	See Note 1
	6/8/2004	160	110	43	4.4	7.4	7.3	<1	
	9/14/2004	<500	<50	41	3.1	6.5	7.5	<0.5	
	12/28/2004	1,100	360	460	4.9	24	5.5	<0.5	
	3/29/2005	3,400	240	940	76	82	73	0.6	
DW-1020	6/30/1999	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	10/1/1999	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	1/5/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	2/8/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.0	
	3/28/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
	4/21/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.0	
	5/26/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	
	6/26/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.0	
	7/21/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.0	
	8/29/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.0	
	9/29/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.0	
	10/3/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.0	
	12/7/2000	140	<50	<0.5	0.58	<0.5	1.3	2	Sample was flagged. See analytical report for details
	12/29/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.0	
	1/5/2001	<50	---	<0.5	<0.5	<0.5	<0.5	<2.0	Sample analyzed by Sparger Technology Inc
	1/5/2001	<50	---	<0.5	<0.5	<0.5	<0.5	<5.0	Sample analyzed by Entech Analytical Labs Inc
	1/29/2001	<50	---	<0.5	<0.5	<0.5	<0.5	<5.0	Sample was flagged. See analytical report for details
	2/9/2001	<50	89	<0.5	<0.5	<0.5	<0.5	<5.0	

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Well ID	Sample Date	TPH-G	TPH-D	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Notes
		----- ppb ----->							
DW-1020	2/22/2001	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.0	
	2/28/2001	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	3/6/2001	<50	<50	<0.5	<0.5	<0.5	<0.5	<2.0	
	4/6/2001	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	5/14/2001	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	6/21/2001	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	7/13/2001	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	8/22/2001	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	9/18/2001	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	
	10/8/2001	<50	160	<0.5	<0.5	<0.5	<0.5	<5	See Note 1
	11/20/2001	<50	<50	<0.5	<0.5	<0.5	<0.5	<5	
	12/19/2001	<50	<50	<0.5	<0.5	<0.5	<0.5	<5	
	1/15/2002	<50	<250	<1	<1	<1	<1	<1	
	2/14/2002	<50	<50	<0.50	<0.50	<0.50	<0.50	<2.0	
	3/20/2002	<50	<50	<1	<1	<1	<1	<1	
	4/11/2002	<50	<50	<0.5	<0.5	<0.5	<0.5	<5	
	5/15/2002	<50	<50	<0.5	<0.5	<0.5	<0.5	<5	
	6/20/2002	<50	<50	<1	<1	<1	<1	<1	
	7/10/2002	<50	<50	<0.5	<0.5	<0.5	<1	<5	
	8/8/2002	<50	<50	<0.5	<0.5	<0.5	<1	<5	
	9/20/2002	<50	<50	<0.5	<0.5	<0.5	<1	<5	
	12/31/2002	<50	<50	<0.5	<0.5	<0.5	<1	<1	
	3/25/2003	<250	<125	<1	<1	<1	<1	<1	
	7/1/2003	<50	<50	<1	<1	<1	<1	<1	
	10/2/2003	<50	<50	<1	<1	<1	<1	<1	
	12/9/2003	<50	<50	<1	<1	<1	<1	<1	
	3/2/2004	<50	77	<1	<1	<1	<1	<1	
6/8/2004	<25	<50	<0.5	<0.5	<0.5	<1	<1		
9/14/2004	<50	<50	<0.5	<0.5	<0.5	<1.5	<0.5		
12/28/2004	<50	<50	<0.5	<0.5	<0.5	<1.5	<0.5		
3/29/2005	<100	<50	<0.5	<0.5	<0.5	<1.5	<0.5		

Table 2. Analytical Results for Ground Water - 1100 Bennett Valley Road, Santa Rosa, California

Explanation:

TPH(G) = Total Petroleum Hydrocarbons as Gasoline

TPH(D) = Total Petroleum Hydrocarbons as Diesel.

MTBE = Methyl tert butyl ether

ppb = parts per billion

APPENDIX C
LABORATORY ANALYTICAL RESULTS AND CHAIN OF CUSTODY RECORD

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on March 31, 2005 by Friedman & Bruya, Inc. from the ECM Group Bennett Valley, 98-511-14, F&BI 503373 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>ECM Group</u>
503373-01	MW-4
503373-02	MW-5
503373-03	MW-6
503373-04	MW-7
503373-05	MW-8
503373-06	MW-9
503373-07	MW-10
503373-08	MW-11
503373-09	MW-12
503373-10	MW-13
503373-11	MW-14
503373-12	DW-1020

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/15/05
Date Received: 03/31/05
Project: Bennett Valley, 98-511-14, F&BI 503373
Date Extracted: 03/31/05
Date Analyzed: 04/01/05 and 04/02/05

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
USING EPA METHOD 8015M**
Results Reported as µg/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u> (C ₆ -C ₁₀)	<u>Surrogate</u> (% Recovery) (Limit 52-150)
MW-4 503373-01	3,800	131
MW-5 d 503373-02	120,000	111
MW-6 d 503373-03	6,300	111
MW-7 503373-04	1,600	118
MW-8 503373-05	<100	106
MW-9 503373-06	<100	105
MW-10 503373-07	<100	105
MW-11 503373-08	<100	106
MW-12 503373-09	580	116
MW-13 503373-10	110	109
MW-14 503373-11	3,400	124
DW-1020 503373-12	<100	109
Method Blank	<100	103

d - The sample was diluted. Detection limits are raised due to dilution.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/15/05
Date Received: 03/31/05
Project: Bennett Valley, 98-511-14, F&BI 503373
Date Extracted: 04/01/05
Date Analyzed: 04/05/05

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL
USING EPA METHOD 8015M
Sample Extracts Passed Through a
Silica Gel Column Prior to Analysis
Results Reported as µg/L (ppb)**

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Surrogate</u> (% Recovery) (Limit 68-143)
MW-4 503373-01	200	83
MW-5 503373-02	5,000	95
MW-6 503373-03	700	79
MW-7 503373-04	100	84
MW-8 503373-05	<50	106
MW-9 503373-06	<50	84
MW-10 503373-07	<50	99
MW-11 503373-08	<50	92
MW-12 503373-09	<50	90
MW-13 503373-10	<50	88
MW-14 503373-11	240	105
DW-1020 503373-12	<50	103
Method Blank	<50	81

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-4	Client:	ECM Group
Date Received:	03/31/05	Project:	98-511-14, F&BI 503373
Date Extracted:	03/31/05	Lab ID:	503373-01
Date Analyzed:	03/31/05	Data File:	033115.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	122	50	150
1,2-Dichloroethane-d4	109	50	150
Toluene-d8	139	50	150
4-Bromofluorobenzene	139	50	150

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	51
Methyl t-butyl ether (MTBE)	180
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	1.8
Benzene	300 ve
Toluene	150
Ethylbenzene	65
m,p-Xylene	210
o-Xylene	110

ve - The value reported exceeded the calibration range established for the analyte. The reported concentration is an estimate.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-4	Client:	ECM Group
Date Received:	03/31/05	Project:	98-511-14, F&BI 503373
Date Extracted:	04/01/05	Lab ID:	503373-01 1/2.5
Date Analyzed:	04/01/05	Data File:	040106.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	127	50	150
1,2-Dichloroethane-d4	114	50	150
Toluene-d8	140	50	150

Compounds:	Concentration ug/L (ppb)
Benzene	350

Note: The sample was diluted due to the presence of high levels of material. Detection limits are raised due to dilution.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID: MW-5	Client: ECM Group
Date Received: 03/31/05	Project: 98-511-14, F&BI 503373
Date Extracted: 03/31/05	Lab ID: 503373-02
Date Analyzed: 04/01/05	Data File: 033128.D
Matrix: water	Instrument: GCMS5
Units: ug/L (ppb)	Operator: YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	102	50	150
1,2-Dichloroethane-d4	83	50	150
Toluene-d8	112	50	150

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	590
Methyl t-butyl ether (MTBE)	590 ve
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	11
Benzene	1,700 ve
Toluene	1,600 ve
Ethylbenzene	850 ve
m,p-Xylene	2,000 ve
o-Xylene	1,100 ve

ve - The value reported exceeded the calibration range established for the analyte. The reported concentration is an estimate.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-5	Client:	ECM Group
Date Received:	03/31/05	Project:	98-511-14, F&BI 503373
Date Extracted:	03/31/05	Lab ID:	503373-02 1/200
Date Analyzed:	04/01/05	Data File:	033124.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	133	50	150
1,2-Dichloroethane-d4	123	50	150
Toluene-d8	137	50	150

Compounds:	Concentration ug/L (ppb)
Methyl t-butyl ether (MTBE)	720
Benzene	28,000
Toluene	6,200
Ethylbenzene	3,200
m,p-Xylene	8,600
o-Xylene	2,600

Note: The sample was diluted due to the presence of high levels of material. Detection limits are raised due to dilution.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-6	Client:	ECM Group
Date Received:	03/31/05	Project:	98-511-14, F&BI 503373
Date Extracted:	03/31/05	Lab ID:	503373-03
Date Analyzed:	04/01/05	Data File:	033129.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	119	50	150
1,2-Dichloroethane-d4	120	50	150
Toluene-d8	138	50	150

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	59
Methyl t-butyl ether (MTBE)	29
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	720 ve
Toluene	160
Ethylbenzene	180
m,p-Xylene	300
o-Xylene	79

ve - The value reported exceeded the calibration range established for the analyte. The reported concentration is an estimate.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-6	Client:	ECM Group
Date Received:	03/31/05	Project:	98-511-14, F&BI 503373
Date Extracted:	03/31/05	Lab ID:	503373-03 1/100
Date Analyzed:	04/01/05	Data File:	033125.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	133	50	150
1,2-Dichloroethane-d4	126	50	150
Toluene-d8	138	50	150

Compounds:	Concentration ug/L (ppb)
Benzene	1,200

Note: The sample was diluted due to the presence of high levels of material. Detection limits are raised due to dilution.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-7	Client:	ECM Group
Date Received:	03/31/05	Project:	98-511-14, F&BI 503373
Date Extracted:	04/01/05	Lab ID:	503373-04
Date Analyzed:	04/01/05	Data File:	040108.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	119	50	150
1,2-Dichloroethane-d4	111	50	150
Toluene-d8	132	50	150

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	110
Methyl t-butyl ether (MTBE)	2
Ethyl t-butyl ether (ETBE)	<1
Diisopropyl ether (DIPE)	<1
t-Amyl methyl ether (TAME)	<1
Benzene	290 ve
Toluene	5
Ethylbenzene	22
m,p-Xylene	7
o-Xylene	1

ve - The value reported exceeded the calibration range established for the analyte. The reported concentration is an estimate.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-7	Client:	ECM Group
Date Received:	03/31/05	Project:	98-511-14, F&BI 503373
Date Extracted:	03/31/05	Lab ID:	503373-04 1/100
Date Analyzed:	04/01/05	Data File:	033126.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	135	50	150
1,2-Dichloroethane-d4	127	50	150
Toluene-d8	140	50	150

Compounds:	Concentration ug/L (ppb)
Benzene	350

Note: The sample was diluted due to the presence of high levels of material. Detection limits are raised due to dilution.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-8	Client:	ECM Group
Date Received:	03/31/05	Project:	98-511-14, F&BI 503373
Date Extracted:	03/31/05	Lab ID:	503373-05
Date Analyzed:	03/31/05	Data File:	033116.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	127	50	150
1,2-Dichloroethane-d4	118	50	150
Toluene-d8	137	50	150

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	1.9
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	0.6
Benzene	3.1
Toluene	<0.5
Ethylbenzene	0.5
m,p-Xylene	<1
o-Xylene	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID: MW-9	Client: ECM Group
Date Received: 03/31/05	Project: 98-511-14, F&BI 503373
Date Extracted: 03/31/05	Lab ID: 503373-06
Date Analyzed: 03/31/05	Data File: 033117.D
Matrix: water	Instrument: GCMS5
Units: ug/L (ppb)	Operator: YA

	% Recovery:	Lower Limit:	Upper Limit:
Surrogates:			
Dibromofluoromethane	131	50	150
1,2-Dichloroethane-d4	123	50	150
Toluene-d8	139	50	150

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	0.9
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-10	Client:	ECM Group
Date Received:	03/31/05	Project:	98-511-14, F&BI 503373
Date Extracted:	03/31/05	Lab ID:	503373-07
Date Analyzed:	03/31/05	Data File:	033118.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	133	50	150
1,2-Dichloroethane-d4	119	50	150
Toluene-d8	139	50	150

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	29
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	3.1
Toluene	1.0
Ethylbenzene	1.1
m,p-Xylene	1.7
o-Xylene	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-11	Client:	ECM Group
Date Received:	03/31/05	Project:	98-511-14, F&BI 503373
Date Extracted:	03/31/05	Lab ID:	503373-08
Date Analyzed:	03/31/05	Data File:	033119.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	134	50	150
1,2-Dichloroethane-d4	127	50	150
Toluene-d8	140	50	150

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	2.3
Toluene	0.6
Ethylbenzene	0.7
m,p-Xylene	1.1
o-Xylene	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-12	Client:	ECM Group
Date Received:	03/31/05	Project:	98-511-14, F&BI 503373
Date Extracted:	03/31/05	Lab ID:	503373-09
Date Analyzed:	03/31/05	Data File:	033120.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	128	50	150
1,2-Dichloroethane-d4	120	50	150
Toluene-d8	135	50	150

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	0.6
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	90
Toluene	3.1
Ethylbenzene	13
m,p-Xylene	6.9
o-Xylene	0.8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-13	Client:	ECM Group
Date Received:	03/31/05	Project:	98-511-14, F&BI 503373
Date Extracted:	03/31/05	Lab ID:	503373-10
Date Analyzed:	03/31/05	Data File:	033121.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	131	50	150
1,2-Dichloroethane-d4	124	50	150
Toluene-d8	137	50	150

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	22
Toluene	1.3
Ethylbenzene	2.2
m,p-Xylene	2.2
o-Xylene	0.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-14	Client:	ECM Group
Date Received:	03/31/05	Project:	98-511-14, F&BI 503373
Date Extracted:	03/31/05	Lab ID:	503373-11
Date Analyzed:	04/01/05	Data File:	033127.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	130	50	150
1,2-Dichloroethane-d4	117	50	150
Toluene-d8	139	50	150

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	25
Methyl t-butyl ether (MTBE)	0.6
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	570 ve
Toluene	76
Ethylbenzene	82
m,p-Xylene	29
o-Xylene	44

ve - The value reported exceeded the calibration range established for the analyte. The reported concentration is an estimate.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	MW-14	Client:	ECM Group
Date Received:	03/31/05	Project:	98-511-14, F&BI 503373
Date Extracted:	03/31/05	Lab ID:	503373-11 1/20
Date Analyzed:	04/01/05	Data File:	033123.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	134	50	150
1,2-Dichloroethane-d4	124	50	150
Toluene-d8	137	50	150

Compounds:	Concentration ug/L (ppb)
Benzene	940

Note: The sample was diluted due to the presence of high levels of material. Detection limits are raised due to dilution.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	DW-1020	Client:	ECM Group
Date Received:	03/31/05	Project:	98-511-14, F&BI 503373
Date Extracted:	03/31/05	Lab ID:	503373-12
Date Analyzed:	03/31/05	Data File:	033122.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	134	50	150
1,2-Dichloroethane-d4	123	50	150
Toluene-d8	139	50	150

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID: Method Blank	Client: ECM Group
Date Received: Not Applicable	Project: 98-511-14, F&BI 503373
Date Extracted: 03/31/05	Lab ID: 05-430 mb
Date Analyzed: 03/31/05	Data File: 033114.D
Matrix: water	Instrument: GCMS5
Units: ug/L (ppb)	Operator: YA

	% Recovery:	Lower Limit:	Upper Limit:
Surrogates:			
Dibromofluoromethane	137	50	150
1,2-Dichloroethane-d4	126	50	150
Toluene-d8	142	50	150

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260B SIM

Client Sample ID:	Method Blank	Client:	ECM Group
Date Received:	Not Applicable	Project:	98-511-14, F&BI 503373
Date Extracted:	04/01/05	Lab ID:	05-431 mb
Date Analyzed:	04/01/05	Data File:	040105.D
Matrix:	water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	YA

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	130	50	150
1,2-Dichloroethane-d4	121	50	150
Toluene-d8	139	50	150

Compounds:	Concentration ug/L (ppb)
Ethanol	<1,000
t-Butyl alcohol (TBA)	<5
Methyl t-butyl ether (MTBE)	<0.5
Ethyl t-butyl ether (ETBE)	<0.5
Diisopropyl ether (DIPE)	<0.5
t-Amyl methyl ether (TAME)	<0.5
Benzene	<0.5
Toluene	<0.5
Ethylbenzene	<0.5
m,p-Xylene	<1
o-Xylene	<0.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/15/05

Date Received: 03/31/05

Project: Bennett Valley, 98-511-14, F&BI 503373

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR TPH AS GASOLINE
USING EPA METHOD 8015M**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Gasoline	µg/L (ppb)	1,000	104	106	65-120	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/15/05

Date Received: 03/31/05

Project: Bennett Valley, 98-511-14, F&BI 503373

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL
USING EPA METHOD 8015M**

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel	µg/L (ppb)	2,500	110	120	68-144	9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/15/05

Date Received: 03/31/05

Project: Bennett Valley, 98-511-14, F&BI 503373

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS
OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260B SIM**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Ethanol	µg/L (ppb)	2,500	105	70-130
t-Butyl alcohol (TBA)	µg/L (ppb)	250	78	70-130
Methyl t-butyl ether (MTBE)	µg/L (ppb)	50	100	70-130
Diisopropyl ether (DIPE)	µg/L (ppb)	50	110	70-130
Ethyl t-butyl ether (ETBE)	µg/L (ppb)	50	108	70-130
t-Amyl methyl ether (TAME)	µg/L (ppb)	50	104	70-130
Benzene	µg/L (ppb)	50	109	70-130
Toluene	µg/L (ppb)	50	110	70-130
Ethylbenzene	µg/L (ppb)	50	113	70-130

Note: The calibration verification result for t-Butyl alcohol (TBA), Methyl t-butyl ether (MTBE) exceeded 15% deviation. The average deviation for all compounds was less than 15%, therefore the initial calibration is considered valid.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/15/05

Date Received: 03/31/05

Project: Bennett Valley, 98-511-14, F&BI 503373

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS
OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260B SIM**

Laboratory Code: 503373-12 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Ethanol	µg/L (ppb)	<1,000	<1,000	nm
t-Butyl alcohol (TBA)	µg/L (ppb)	<5	<5	nm
Methyl t-butyl ether (MTBE)	µg/L (ppb)	<0.5	<0.5	nm
Diisopropyl ether (DIPE)	µg/L (ppb)	<0.5	<0.5	nm
Ethyl t-butyl ether (ETBE)	µg/L (ppb)	<0.5	<0.5	nm
t-Amyl methyl ether (TAME)	µg/L (ppb)	<0.5	<0.5	nm
Benzene	µg/L (ppb)	<0.5	<0.5	nm
Toluene	µg/L (ppb)	<0.5	<0.5	nm
Ethylbenzene	µg/L (ppb)	<0.5	<0.5	nm
m,p-Xylene	µg/L (ppb)	<0.5	<0.5	nm
o-Xylene	µg/L (ppb)	<0.5	<0.5	nm

Laboratory Code: 503373-12 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Ethanol	µg/L (ppb)	2,500	<1,000	104	50-150
t-Butyl alcohol (TBA)	µg/L (ppb)	50	<5	78	50-150
Methyl t-butyl ether (MTBE)	µg/L (ppb)	50	<0.5	103	50-150
Diisopropyl ether (DIPE)	µg/L (ppb)	50	<0.5	112	50-150
Ethyl t-butyl ether (ETBE)	µg/L (ppb)	50	<0.5	110	50-150
t-Amyl methyl ether (TAME)	µg/L (ppb)	50	<0.5	107	50-150
Benzene	µg/L (ppb)	50	<0.5	112	50-150
Toluene	µg/L (ppb)	50	<0.5	114	50-150

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/15/05

Date Received: 03/31/05

Project: Bennett Valley, 98-511-14, F&BI 503373

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS
OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260B SIM**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Ethanol	μg/L (ppb)	2,500	101	70-130
t-Butyl alcohol (TBA)	μg/L (ppb)	250	74	70-130
Methyl t-butyl ether (MTBE)	μg/L (ppb)	50	98	70-130
Diisopropyl ether (DIPE)	μg/L (ppb)	50	107	70-130
Ethyl t-butyl ether (ETBE)	μg/L (ppb)	50	105	70-130
t-Amyl methyl ether (TAME)	μg/L (ppb)	50	102	70-130
Benzene	μg/L (ppb)	50	106	70-130
Toluene	μg/L (ppb)	50	103	70-130

Note: The calibration verification result for t-Butyl alcohol (TBA), (MTBE) exceeded 15% deviation. The average deviation for all compounds was less than 15%, therefore the initial calibration is considered valid.

Appendix E

Standard Operating Procedures

ECM STANDARD OPERATING PROCEDURE

GROUND WATER SAMPLING

The following describes sampling procedures used by ECM field personnel to collect and handle ground water samples. Before samples are collected, careful consideration is given to the type of analysis to be performed so that precautions are taken to prevent loss of volatile components or contamination of the sample, and to preserve the sample for subsequent analysis. Wells will be sampled no less than 24 hours after well development. Collection methods specific to ground water sampling are presented below.

Prior to sampling, each well is purged of a minimum of three well casing volumes of water using a steam-cleaned PVC bailer, or a pre-cleaned pump. Temperature, pH and electrical conductivity are measured at least three times during purging. Purging is continued until these parameters have stabilized (i.e., changes in temperature, pH or conductivity do not exceed 10%).

Ground water samples are collected from the wells/borings with steam-cleaned or disposable Teflon bailers. The water samples are decanted into the appropriate container for the analysis to be performed. Pre-preserved sample containers may be used or the analytic laboratory may add preservative to the sample upon arrival. Duplicate samples are collected from each well as a back-up sample and/or to provide quality control. The samples are labeled to include the project number, sample ID, date, preservative, and the field person's initials. The samples are placed in polyethylene bags and in an ice chest (maintained at 4 C with blue ice or ice) for transport under chain-of-custody to the laboratory.

The chain-of-custody form includes the project number, analysis requested, sample ID, date analysis and the ECM field person's name. The form is signed and dated (with the transfer time) by each person who yields or receives the samples beginning with the field personnel and ending with the laboratory personnel.